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## ABSTRACT

In order for youth to make realistic and informed career choices, they need ready access to relevant, up-to-date occupational information. These documents outline and describe the development of such a career information system in Iowa, created through the state board of public instruction. The career information system is three basic services: A needle-sort (manual) delivery of occupational information; a computerized delivery of this information; and career education inservice activities for school districts. Each of the 252 job briefs specifies qualifications, work descriptions, earnings and benefits, advantages and disadvantages, employment and advancement opportunities, preparation required and training available, and additional sources of information. Notice of training opportunities in Iowa for the various occupations is also readily accessible. The report describes activities in the area of evaluation of the system to date. The report has a number of appendices, including lists of subscribers to the system and a statistical summary of user activity. (NG)

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State of Iowa  
DEPARTMENT OF PUBLIC INSTRUCTION  
Career Information System of Iowa  
Grimes State Office Building  
Des Moines, Iowa 50319

CAREER INFORMATION SYSTEM OF IOWA  
ACTIVITY REPORT  
FOR FY 1975

Prepared and Submitted by  
the Staff of the  
Career Information System of Iowa  
A Unit of  
Guidance Services Section

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

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Due to space and other problems,  
the following pages have been removed:

Appendix E

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July 1, 1975

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## Introduction

For Iowa's youth to make realistic and informed career choices, they need ready access to relevant, up-to-date occupational information in a way they can understand and use it. Students who have this information available to them are more likely to make better decisions about jobs and careers.

In 1971, two exemplary career education projects--IOWAscript and Computerized Vocational Information System (CVIS)--were funded by the Career Education Division of the Department of Public Instruction to provide students with much needed occupational information. While both of these projects enjoyed success, they were only funded for three years.

Recognizing the importance of this occupational information dissemination concept, the State Board of Public Instruction took action in the summer of 1974 to create the Career Information System of Iowa (CISI). Since August, 1974, then, CISI has been a unit of the Guidance Services Section, supported with Career Education monies made available by the Career Education Division and the Guidance Services Section.

The Career Information System of Iowa is three basic services: a needle-sort (manual) delivery of occupational information, a computerized delivery of this information, and career education inservice activities for school districts. The development and implementation of these services in Iowa's educational agencies was the task defined for CISI during its initial year of operation. It is imperative to review the activities of this first year to effectively plan for the future. Accordingly, it is the purpose of this report to describe the activities related to each of the three services of CISI.

### Needle-Sort (Manual) Delivery of Occupational Information

Objective: To provide a needle-sort deck of aperture cards containing occupational information for use by students throughout Iowa.

The initial task in this area was to reformat and update all the information contained in the 252 job briefs which comprised the IOWAscript job index, an index of "entry level" occupations, those requiring less than baccalaureate degree level post-secondary education. Each of the job briefs now contains seven components:

1. Qualifications
2. Work description
3. Earnings and benefits
4. Advantages and disadvantages
5. Employment and advancement opportunities
6. Preparation required and training available
7. Additional sources of information

(See Appendix E for a print copy of one occupational brief)

The data was collected from a variety of sources, but the most frequently used sources included:

1. U.S. Department of Labor (Manpower Administration and the Bureau of Labor Statistics)  
Dictionary of Occupational Titles, Volumes I and II  
Occupation Outlook Handbook and Quarterly  
Monthly Labor Review  
Manpower
2. U.S. Department of Health, Education and Welfare  
Vocational Education and Occupations
3. U.S. Department of Health, Education and Welfare  
National Center for Educational Statistics  
Standard Terminology for Curriculum and Instruction in  
Local and State Schools
4. 1974 National Trade and Professional Associations of the U.S.
5. Iowa Department of Public Instruction  
Quick Reference Guide to Higher Education in Iowa  
Post-Secondary Program Master

6. Iowa Employment Security Commission  
Statewide Wage Survey  
Licensed Occupations in Iowa
7. Area X Education Agency/Iowa Personnel and Guidance Association  
Post-High School Education: Iowa
8. Supplemental Personal Interviews with Workers

The activity of updating, reformatting and coding all of the occupations was carried out from September through December, 1974. The actual deck production included several steps which involved the staff of the Word Processing Center as well as the secretarial staff of CISI. Perfect camera-ready copy was prepared of each brief. At the same time, a job title and a brief description were typed on each aperture card, a card containing an undeveloped piece of microfilm. The balance of the deck production was carried out under contract by personnel at the Des Moines Area Community College. This included filming the brief, preparing the duplicate cards, punching needle-sort holes in the cards, notching the cards according to the attribute coding and finally, collating each deck. This whole process proved to be very slow and piecemeal which resulted in delivering the decks over a two-month period during March and April. The procedure for distribution of materials will be discussed in the section on inservice activities.

The primary means by which a student gains access to the occupational information in the needle-sort deck is through the completion of the QUEST. The QUEST is a twenty-five item self-perception questionnaire which enables students to assess their interests and aptitudes (see Appendix E for a copy of the QUEST, in the Needle-Sort User's Handbook). Upon completion of the QUEST, the student goes through a needle-sort

process with the deck of occupational cards to select occupations that correspond to the student's interests or aptitudes. In order to make this possible, it was necessary to code each attribute identified in the QUEST items to each of the occupations. This procedure permits the student to focus on specific occupations of interest. Each occupation card in the deck has an aperture (opening) which holds a piece of microfilm containing the occupational data for a given job. The student inserts the card in a microfiche reader to view the information (see Appendix E for a sample of one occupation aperture card). A second means by which a student can investigate the occupational information is through a sort of the fifteen U.S. Office of Education occupational clusters. Again using a needle-sort process, a student can sort out all of the occupations in a given cluster.

At the close of the 1974-75 school year, there were 146 subscribers to the CISI needle-sort occupational delivery and related services (see Appendix A for a list of subscribers by merged area). During the month of June, an additional twelve orders were received. It should be noted that in creating the Career Information System of Iowa, a "user pays" policy was established which requires the subscribing agencies to bear some of the costs as their commitment to the concept. Accordingly, the basic yearly subscription for the needle-sort delivery is \$60.00 (see Appendix E for a copy of the order form).

Training for many of the occupations in the index is offered at Iowa's Area Schools. As a supplement to the occupational information, CISI is providing each subscriber with a Post-Secondary Educational Opportunities Microfiche Deck. For Part I of this deck, each Area

School generously provided information in camera-ready form on all of their Preparatory and College Parallel (Career Option) programs.

The information on each of these programs includes:

1. Brief description of program
2. Curriculum
3. Employment and advancement opportunities
4. Salary
5. Helpful high school subjects
6. Admission procedures
7. Cost of the program

This information is displayed on 4" x 6" microfiche (see Appendix E for a sample of the Area School Program microfiche). All of the programs at a given Area School are on a single microfiche which enables the student to gain an overview of that school's offerings. Since there is also a fiche for each program which is offered at more than one Area School, a student may explore a specific program, comparing its characteristics at each school offering it. This material is currently being produced and it will be provided to all of the subscribing schools and Area Schools in September.

At the present time there are no occupations in the index which require training at the baccalaureate degree level or beyond. In order to make the deck more reflective of the total employment spectrum, fifty "professional" occupations have been identified for inclusion in the deck. At present, the data is being collected, and plans are to add these to the occupational deck in September.

In order to assist counselors, teachers and others to achieve maximum utilization of the needle-sort deck, a Leader's Guide was developed. The Guide is divided into five sections:

1. Introduction: Overview of CISI
2. Needle-sort deck instructions
3. An Integrated Career Education Curriculum, K-12
4. Quick Reference Guide to High Education in Iowa, State of Iowa, 1974
5. Employment Awareness



The Guide was developed in loose-leaf notebook form because much of the material is designed to be placed in the hands of students, so counselors and teachers have been encouraged to reproduce any of the material for use in classes with students.

### Computerized Delivery of Occupational Information

Objective: To provide a computerized delivery of occupational information to students in selected pilot/demonstration schools.

All of the occupational information that is included in the needle-sort deck has been placed in disk storage on the Hewlett-Packard 2000F computer housed and operated by the Management Information Division of the Department of Public Instruction. Again, the primary access to the occupational information via the computerized delivery mode is through the completion of the QUEST. The QUEST and the attribute coding for each occupation have been programmed on the computer. In essence, what a student is doing manually with the needle-sort deck, the computer does electronically for the student.

The computerized delivery utilizes several kinds of student-operated computer terminals. One is the teletypewriter (TTY) computer terminal which provides printed information identical to that available on the aperture card in the manual delivery. Each such terminal "speaks" with the DPI computer via a telephone connection, facilitating student interaction, "talking", with the computer. As the student is answering the QUEST, the computer is sorting out occupations. When all the QUEST responses have been entered, the computer gives the student a listing of the occupations remaining. At this point the student may ask to see a description of a specific occupation, or go back and change some answers, exploring other options. Also, a student may inquire as to why a particular occupation was eliminated (see Appendix E for a copy of the Computerized User's Handbook).

During this first year, three local school districts were identified to determine the feasibility of making the computerized delivery available on a statewide basis. The pilot/demonstration sites selected were:

1. South Winneshiek Jr.-Sr. High School, Calmar
2. Fairfield High School, Fairfield
3. Kennedy High School, Cedar Rapids  
Additional terminals provided by the district were used at Taft and Roosevelt Junior Highs, and Metro (Alternative School). (A limited use was also made at Kirkwood Community College.)

These schools were selected, in part, to represent rural, medium-sized and urban settings respectively. In February, 1975, the CISI staff spent two days at each of the sites to install the computerized delivery. Much of the time was devoted to providing staff inservice on the operation of the terminals and on ways to utilize the system most effectively with students.

Students, teachers, and counselors in the three sites utilized the computerized delivery mode during the period from February through May, 1975. During this time there were a total of 1139 users (see Appendix B for a Summary Report of Statistics for the four months through May 31, 1975, combining all three sites).

For the summer months, the three terminals have been moved to three area schools:

1. Northeast Iowa Area Vocational-Technical School at Calmar, where it will be utilized by students and the counseling staff at the Area School and by the clients of the Northeast Iowa Community Action Program.
2. Indian Hills Community College, Ottumwa, where it is located in the Career Orientation Center.
3. Kirkwood Community College, Cedar Rapids, where the terminal is being used by students and the counseling staff.

In addition to the activity at these area schools, the Des Moines District Office of the DPI's Division of Rehabilitation, Education, and Services Branch (DRES) is also using the CISI demonstration terminal. In July this terminal will be moved to the DRES Iowa State Vocational Center. Also during this summer, a group of Upward Bound students at Simpson College in Indianola are utilizing the computerized delivery system through a terminal provided by Simpson College. The CISI Technical Consultant will be providing inservice assistance for this and all other computer sites.

In September, the three terminals at the area schools will be returned to the local school sites for the remainder of the calendar year. In addition, plans have been made to add five new sites during FY 76. The schedule calls for two of these to be in operation by September or October. These new sites have tentatively been identified in Merged Areas V and XIV. It is hoped that the computer software package of CISI programs and information on the DPI computer can be placed on the computers at Luther College in Decorah for use by the schools in the Northeast Iowa Computer Network and at the Area 10 Educational Agency in Cedar Rapids for use by the schools in that merged area. One of the priorities in seeking diversity in pilot sites has been to assess what populations can effectively utilize the computerized delivery of occupational information.

### Inservice Activities

- Objective: To provide inservice assistance to Iowa educators:
- a. on the operation and effective utilization of both delivery modes
  - b. on the implementation of an integrated career education curriculum.

Perhaps the most important component of the Career Information System of Iowa is that of providing meaningful inservice activities. Providing occupational information for exploration and career decision-making by students is of little value if the material does not reach the students. Too often, when people have material that they are not sure how to use, the tendency is to let it sit on a shelf to gather dust. This principle guided the CISI staff to develop a policy that no subscription, i.e., needle-sort deck, Leader's Guide, etc., would be mailed to a participating school. Consequently, as decks came out of production, workshops on the utilization of the needle-sort deck and associated materials were scheduled for subscribing schools. When a school subscribes to the CISI services, a contact person is identified who takes responsibility for the effective utilization of the deck.

During March and April seven workshops were held in the following locations:

1. Carroll
2. Algona
3. Sheldon
4. Des Moines
5. Marshalltown
6. Galmar
7. Cedar Rapids

Each workshop lasted from 9:00 a.m. until 2:00 p.m. with the group eating lunch together. Most of the participants were school counselors; however, very often the counselor would bring an administrator, librarian or a classroom teacher.

The following was the agenda for each workshop:

1. Overview of CISI
2. Operation of the needle-sort deck
3. Implementation of the needle-sort material into an integrated career education curriculum
4. Demonstration of the computerized delivery of occupational information.

A total of 107 CISI needle-sort decks were distributed through these workshops. However, there were orders that came in after a given area workshop had been held and there were some schools too far from any workshop site. In these instances, the materials were delivered in person directly to the school. A brief inservice program was provided for the contact person by the CISI inservice consultant or by another DPI consultant. Commendably, this represented a cooperative intra-agency effort. A total of 39 subscriptions were delivered in this manner.

In addition to the installation inservice workshops, the CISI staff made 27 presentations throughout the state during the year. These programs, usually lasting two hours, covered a wide range of populations. The purpose of these sessions was to acquaint people with CISI and its services and an orientation to the career education concept. The response to these presentations was very positive and far exceeded the expectations of the CISI staff.

There were two areas of concern frequently expressed at the various presentations. Many counselors throughout the state indicated that their districts were very concerned about developing a comprehensive career education curriculum, K-12. However, they expressed the need for much more in-depth inservice assistance. A second concern voiced was the need for additional material, particularly for the elementary level. Both of these concerns will be addressed in a later section of this report.

### Evaluation

In the interest of providing the user not only a quality product but one that was meaningfully responsive to real needs, the area of evaluation has been an important consideration. The CISI staff developed a Career Planning Questionnaire as a pre-test for students before working with the needle-sort deck. The first 100 subscribing schools were requested to serve as our sample and the questionnaire was to be administered to 10% of the eighth and eleven grade students in each school. In essence the purpose was to assess whether students felt they needed additional occupational information. Fifty-seven schools returned completed questionnaires with a total of 937 student responses. The results were very enlightening. Ninety-five percent of the students indicated they wanted some form of additional occupational information. Seventy-six percent of the students indicated they would like assistance in making career decisions (see Appendix C for a copy of the Career Planning Questionnaire and the percentage of student responses to each item).

A post-test will be given to the same population next spring in an effort to determine student attitudes toward the CISI needle-sort deck as a delivery mode, the usefulness of the occupational information and its effect on their career decision-making process. A similar type of questionnaire will be developed to assess students on the same factors as they relate to the computerized delivery of occupational information in the pilot sites.

Priorities for FY 76

The CISI staff has identified several areas that will be high priorities for FY 76. The first is to be sure that the 50 "professional" occupations are ready for inclusion in the deck in September. Another priority is the development of materials for use by students in elementary schools. The focus of these materials will be on an awareness of the world of work rather than information about specific occupations. The elementary deck will focus on the fifteen U.S. Office of Education occupational clusters. The deck will attempt to describe for the students the relationship among jobs on the basis of characteristics, i.e., "people" occupations, "data" occupations and occupations dealing with "things". The elementary materials will include a Leader's Guide to assist teachers and counselors in using the materials in the classroom. Plans call for placing the needle-sort deck in three special education settings to determine the feasibility of using these materials with special populations.

Next year, the CISI staff plans to conduct a series of follow-up workshops throughout the state for subscribing schools. One of the purposes of these workshops will be to deliver the elementary materials and explain their use. Consideration is being given to providing extensive inservice on the development and implementation of an integrated career education curriculum. However, inclusion of this inservice activity will be dictated by the direction of the DPI plan for statewide career education workshops. It will only be provided if it can complement the total DPI effort.



There are two primary objectives which have been established by the CISI staff:

1. To provide the needle-sort deck of occupations to every secondary school attendance center in the state of Iowa, to every Area Education Agency, to every Area School, to every college and university, to every branch office of the Iowa Employment Security Commission and to any other educational or social agency where people may benefit from its use.
2. To make available the computerized delivery of occupational information to the populations enumerated above.

The realization of these objectives is contingent on many factors. Any potential user of the needle-sort deck must be willing to commit the funds to purchase a microfiche reader for viewing the occupational information. There is also the annual cost to the subscriber for an updated product. Consideration is being given to a one-time user subscription payment, proof of microfiche reader availability and assignment of a local CISI contact/coordinator, and the DPI commitment would be to provide the system updating on a continuing basis at no additional cost.

A vendor has been identified and a purchase order has been let for 1000 needle-sort decks to be produced in toto (printed, punched, notched and collated) on a substantial plastic stock (present decks are on a heavy paper stock). This production consolidation will permit virtually immediate delivery of a high quality, long-lasting product to CISI subscribers.

Conversion to this system provides an additional advantage. The user would still do the needle-sort manipulation with the yard deck, but the aperture with the occupational description would no longer be on


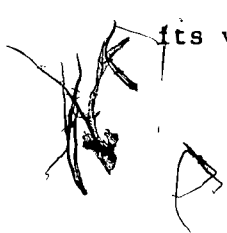
each card. Rather, all of the occupational briefs would be on 4" x 6" microfiche arranged alphabetically by cluster. This is consistent with the Post-Secondary Educational Opportunities Microfiche Deck format.

In the near future, the CISI staff will be able to access the COM (Computer Output Microfilm) facility in the Comptroller's office to produce all of the occupational information on microfiche. This is especially important because of the ongoing need to continually and rapidly update the information. This process will mean that as quickly as changes are typed into the computer program, updated microfiche can be generated and distributed to all the subscribers.

Certainly, the statewide implementation of the computerized delivery is a much more complex endeavor. First, it will be necessary to have a statewide computer network or a system of smaller networks covering the state. To achieve this will require substantial commitments of funds and the cooperative planning of many agencies. It is important to recognize that the computer network(s) would have a great many applications in addition to the delivery of CISI data. These include student scheduling, budget preparation, financial accounting, grade reporting, instructional packages and providing information on employment openings throughout the state.

Summary

This report has outlined the exciting but challenging initial year of the Career Information System of Iowa. Students' need for current, relevant occupational information and assistance in career decision-making is clear. The challenge will be always to deliver the product and assist students most effectively. At the same time, it is imperative to provide educators vital assistance in their efforts to build instructional programs which are responsive to the career development needs of students. The CISI staff is committed to participating fully in the efforts of the Department of Public Instruction to fulfill its vital leadership role.



# APPENDIX A

State of Iowa  
DEPARTMENT OF PUBLIC INSTRUCTION  
Career Information System of Iowa  
Grimes State Office Building  
Des Moines, Iowa 50319

CAREER INFORMATION SYSTEM OF IOWA (CISI) LIST OF SUBSCRIBERS BY AREA

MERGED AREA I --- Total - 9 subscribing schools

Allamakee Community Schools - Waukon High School - Waukon  
Eastern Allamakee Community Schools - Kee High School - Lansing  
Edgewood-Colesburg Jr-Sr High School - Edgewood  
Garnavillo Jr-Sr High School - Garnavillo  
Howard-Winneshiek Community Schools - Crestwood High School - Cresco  
Mar-Mac Sr High School - McGregor  
Northeast Iowa Community Action - Decorah  
South Winneshiek Sr High School - Calmar  
Western Dubuque Community Schools - Aquin High School - Cascade

MERGED AREA II --- Total - 5 subscribing schools

Clear Lake High School - Clear Lake  
Garner-Hayfield High School - Garner  
Osage High School - Osage  
St. Ansgar High School - St. Ansgar  
Woden-Crystal Lake Jr-Sr High School - Crystal Lake

MERGED AREA III --- Total - 10 subscribing schools

Algona High School - Algona  
Arnolds Park High School - Arnolds Park  
Ayrshire High School - Ayrshire  
Clay Central High School - Royal  
Emmetsburg High School - Emmetsburg  
Everly Sr High School - Everly  
Graettinger Jr-Sr High School - Graettinger  
Harris-Lake Park High School - Lake Park  
Ruthven High School - Ruthven  
Spencer High School - Spencer

MERGED AREA IV --- Total - 10 subscribing schools

Central Lyon Sr High School - Rock Rapids  
Floyd Valley High School - Alton  
George Jr-Sr High School - George  
Hartley High School - Hartley  
Marcus Community Schools - Marcus  
Paullina High School - Paullina  
Primghar High School - Primghar  
Sanborn Jr-Sr High School - Sanborn  
Sheldon High School - Sheldon  
West Lyon High School - Inwood

MERGED AREA V --- Total - 20 subscribing schools

Alta Jr-Sr High School - Alta  
Belmond Community High School - Belmond  
Boone Valley Jr-Sr High School - Renwick  
Clarion High School - Clarion  
Eagle Grove High School - Eagle Grove  
East Greene Community Schools - Grand Junction High School - Grand Junction  
Humboldt High School - Humboldt  
Lake City Community Schools - Lake City  
Lake View-Auburn High School - Lake View  
Laurens High School - Laurens  
Manson High School - Manson  
Odebolt-Arthur High School - Odebolt  
Pocahontas High School - Pocahontas  
Prairie High School - Gowrie  
Sac Jr-Sr High School - Sac City  
Sioux Rapids High School - Sioux Rapids  
South Hamilton High School - Jewell  
Storm Lake Sr High School - Storm Lake  
Stratford High School - Stratford  
Wall Lake High School - Wall Lake

MERGED AREA VI --- Total - 9 subscribing schools

Beaman-Conrad Jr-Sr High School - Conrad  
Garwin Sr High School - Garwin  
Hubbard Jr-Sr High School - Hubbard  
Iowa Falls Sr High School - Iowa Falls  
Marshalltown Community Schools - Marshalltown  
South Tama County High School - Tama  
South Tama County Jr High School - Toledo  
Steamboat Rock High School - Steamboat Rock  
Union-Whitten Jr-Sr High School - Union

MERGED AREA VII --- Total - 8 subscribing schools

Dunkerton Jr-Sr High School - Dunkerton  
East Buchanan Community Schools - Winthrop  
Grundy Center High School - Grundy Center  
Independence High School - Independence  
Janesville High School - Janesville  
North Tama High School - Traer  
Sumner High School - Sumner  
Waverly-Shell Rock Community Schools - Waverly

MERGED AREA IX --- Total - 10 subscribing schools

Bellevue High School - Bellevue  
Bennett Jr-Sr High School - Bennett  
Central Clinton Community School - Central High School - De Witt  
Clinton High School - Clinton  
Davenport Community Schools - Smart Jr High School - Davenport  
Davenport Community Schools - I.M.C. Vocational Center - Davenport  
Durant High School - Durant  
Lost Nation Jr-Sr High School - Lost Nation  
Northeast Jr-Sr High School - Goose Lake  
West Liberty Sr High School - West Liberty

MERGED AREA X --- Total - 12 subscribing schools

Amana High School - Middle Amana  
Area X - Joint County School System - Cedar Rapids  
Cedar Rapids Community Schools - John F. Kennedy High School - Cedar Rapids  
Cedar Rapids Community Schools - Pupil Personnel Services - Cedar Rapids  
Iowa City Community Schools - City High School - Iowa City  
Iowa Valley Jr-Sr High School - Marengo  
Kirkwood Community College - Cedar Rapids  
Lone Tree Jr-Sr High School - Lone Tree  
Marion High School - Marion  
Marion High School - Marion  
Norway High School - Norway  
Washington High School - Washington

MERGED AREA XI --- Total - 40 subscribing schools

AEA XI Media Center - Ankeny  
Ankeny Community Schools - Neveln Jr High School - Ankeny  
Audubon High School - Audubon  
Bondurant-Farrar Jr-Sr High School - Bondurant  
Boone High School - Boone  
Carroll High School - Carroll  
Dallas Community High School - Dallas Center  
Des Moines Independent Community Schools - Wilson Jr High School - Des Moines  
Des Moines Independent Community Schools - Hoyt Middle School - Des Moines  
Des Moines Independent Community Schools - Harding Jr High School - Des Moines  
Des Moines Independent Community Schools - Irving Jr High School - Des Moines  
Des Moines Independent Community Schools - Franklin Jr High School - Des Moines  
Des Moines Independent Community Schools - McCombs Jr High School - Des Moines  
Earlham Jr-Sr High School - Earlham  
Exira Jr-Sr High School - Exira  
Gilbert Jr-Sr High School - Gilbert  
Glidden-Ralston Jr-Sr High School - Glidden  
Grand Community High School - Boxholm  
Interstate 35 High School - Truro  
Johnston Sr High School - Johnston

MERGED AREA XI --- continued

Knoxville Senior High School - Knoxville  
Manning High School - Manning  
Martensdale-St. Marys Jr-Sr High School - Martensdale  
Maxwell High School - Maxwell  
Mingo Jr-Sr High School - Mingo  
Nevada High School - Nevada  
Nevada Jr High School - Nevada  
Newton Community Schools - Berg Jr High School - Newton  
North Polk Jr-Sr High School - Alleman  
Panora-Linden High School - Panora  
Prairie City Jr-Sr High School - Prairie City  
Roland-Story Community High School - Story City  
Saydel High School - Des Moines  
Simpson College - Upward Bound Program - Indianola  
Southeast Polk High School - Runnells  
Stuart-Menlo High School - Stuart  
Urbandale High School - Urbandale  
Urbandale Jr High School - Urbandale  
West Des Moines Community Schools - Valley High School - West Des Moines  
Y-J-B High School - Jamaica

MERGED AREA XII --- Total - 4 subscribing schools

Cherokee Community Schools - Washington High School - Cherokee  
Ida Grove Sr High School - Ida Grove  
Maple Valley High School - Mapleton  
Remsen-Union High School - Remsen

MERGED AREA XIII --- Total - 5 subscribing schools

Glenwood Sr High School - Glenwood  
Hamburg Jr-Sr High School - Hamburg  
Harlan High School - Harlan  
Nishna Valley Jr-Sr High School - Hastings  
South Page Jr-Sr High School - College Springs

MERGED AREA XIV --- Total - 3 subscribing schools

Creston Community Schools - Burton Jones Jr High School - Creston  
East Union Jr-Sr High School - Afton  
New Market Jr-Sr High School - New Market



MERGED AREA XV --- Total - 12 subscribing schools

Albia High School - Albia  
Cardinal High School - Eldon  
Centerville High School - Centerville  
Chariton High School - Chariton  
Fairfield High School - Fairfield  
Indian Hills Community College - Ottumwa  
Keota High School - Keota  
North Mahaska Jr-Sr High School - New Sharon  
Oskaloosa High School - Oskaloosa  
Ottumwa High School - Ottumwa  
Wayne Community High School - Corydon  
Wayne County School System - Corydon

MERGED AREA XVI --- Total - 4 subscribing schools

Danville Jr-Sr High School - Danville  
Fort Madison Community Schools - Ft. Madison High School - Fort Madison  
Keokuk High School - Keokuk  
Mount Pleasant High School - Mount Pleasant

SUBSCRIBERS OUTSIDE IOWA --- Total - 1 subscribing school

Lincoln Public Schools - Lincoln, Nebraska

# APPENDIX B

# CISI COMPUTER USAGE STATISTICAL SUMMARY

FEBRUARY 1, 1975 - MAY 31, 1975

TIME ON COMPUTER (DOES NOT INCLUDE FEBRUARY)

CISI PROGRAM WAS ACTIVATED 1139 TIMES DURING THIS PERIOD.

TOTAL TIME IN MINUTES

13,315

TOTAL NUMBER OF USERS

515

AVERAGE PROGRAM TIME PER USER

25.85

## COMPONENTS USED

HELLO	QUEST	HOW-MANY	CHANGE	BACKUP	LIST	WHY-NOT	INFO
221	375	313	211	107	228	150	507

DESCRIPTION	EDUCATION	BIBLIOGRAPHY	CLUSTER	ATTRIBUTE	BATCH
798	380	226	73	11	238

START-OVER	FINISH	STOP
20	470	649

## TEN OCCUPATIONS MOST INQUIRED ABOUT

OCC #	TITLE	INQUIRIES
1	7852 BARTENDER	41
2	4734 PHOTOGRAPHER	41
3	9416 POLICE OFFICER	36
4	6144 TRUCK DRIVER	36
5	4127 WILDLIFE & CONSERVATION TECH	33
6	1615 ACCOUNTING TECHNICIAN	32
7	1412 SECRETARY	31
8	9874 PROFESSIONAL ATHLETE	30

# CISI COMPUTER USAGE STATISTICAL SUMMARY

2

FEBRUARY 1, 1975 - MAY 31, 1975

OCC #	TITLE	INQUIRIES
9	1684 COMPUTER PROGRAMMER	29
10	4164 FARMER	28

## FREQUENCY OF QUEST RESPONSES

01=YES	01=No	01=CD	01=DK	TOTAL
244	181	126	58	576

02=YES	02=No	TOTAL
26	546	572

03=YES	03=No	TOTAL
3	559	562

04=AR03	04=AR06	04=AR20	04=AREA	04=IOWA	04=MM	04=US	TOTAL
0	0	0	0	162	81	324	567

05=LM	05=LMSC	05=SC	05=SCR	05=RUR	05=NP	TOTAL
79	84	48	110	29	212	562

06=IN	06=OUT	06=NP	TOTAL
112	80	368	560

07=VEN	07=WO	07=NP	TOTAL
135	83	354	572

08=No	08=HS	08=ONE	08=Two	08=FOUR	08=ANY	TOTAL
32	146	65	86	107	125	561

09=HVG	09=HFG	09=HFP	09=HDK	TOTAL
147	333	36	45	561

# CISI COMPUTER USAGE STATISTICAL SUMMARY

3

FEBRUARY 1, 1975 - MAY 31, 1975

10=CVG	10=CFG	10=CFP	10=CDK	TOTAL
121	327	58	49	555

11=WG	11=VFG	11=VEP	11=VDK	TOTAL
106	299	102	31	538

12=NVG	12=NFG	12=NFP	12=NDK	TOTAL
154	277	86	14	531

13=GVG	13=GFG	13=GFP	13=GDK	TOTAL
194	303	26	11	534

14=YES	14=NOT	14=NP	TOTAL
165	187	181	533

15=YES	15=NOT	15=NP	TOTAL
261	146	123	530

16=YES	16=NOT	16=NP	TOTAL
175	214	135	524

17=YES	17=NOT	17=NP	TOTAL
288	122	114	524

18=YES	18=NOT	18=NP	TOTAL
216	139	161	516

19=YES	19=NOT	19=NP	TOTAL
227	171	123	521

20=YES	20=NOT	20=NP	TOTAL
270	165	84	519

# CISI COMPUTER USAGE STATISTICAL SUMMARY

4

FEBRUARY 1, 1975 - MAY 31, 1975

21=Yes	21=Not	21=NP	TOTAL
171	221	125	517

22=Yes	22=Not	22=NP	TOTAL
275	235	108	518

23=Yes	23=Not	23=NP	TOTAL
136	262	117	515

24=Yes	24=Not	24=NP	TOTAL
244	149	124	517

25=MIN	25=350	25=500	25=700	25=1000	25=NI	TOTAL
49	63	177	135	51	45	520

# APPENDIX C

# CAREER PLANNING QUESTIONNAIRE

School: \_\_\_\_\_ Grade: \_\_\_\_\_ Sex: \_\_\_\_\_ M \_\_\_\_\_ F \_\_\_\_\_

TOTAL RESPONSES = 937.

1. Which of the following sources have you used to find information about certain careers?

- \*70% a. Discussed jobs with my parents, relatives or friends.
- 27% b. Talked with workers in jobs.
- 34% c. Talked with a teacher or counselor about my goals, interests, and abilities related to possible jobs.
- 36% d. Read a job description in the library or guidance office job file.
- 12% e. Other (please describe) \_\_\_\_\_
- 01% f. I have not yet tried to find information about certain jobs.

2. Have you chosen a specific career for yourself?

YES, because:

- 30% a. It is what I wanted to do with my life.
- 15% b. The salary will be good.
- 37% c. It relates well to my interests and abilities.
- 12% d. The job offers opportunity for advancement.
- 11% e. The amount of training is about right for me.
- 05% f. Other (please describe) \_\_\_\_\_

NO, because:

- 09% a. It is too early to decide.
- 03% b. I am not interested right now.
- 25% c. I want to get more information.
- 09% d. Other (please describe) \_\_\_\_\_

3. What kind of career information do you think you need?

- 19% a. Information about more jobs.
- 42% b. More information about specific jobs.
- 50% c. Information about job preparation and training.
- 34% d. Information relating my strengths and weaknesses to particular jobs.
- 05% e. I don't need more career information.

4. Various jobs require different amounts of preparation and training. In which types of jobs are you most interested?

- 38% a. Those that require up to two years of training after high school.
- 33% b. Those that require up to four years of training after high school.
- 12% c. Those that require more than four years of training after high school.
- 21% d. Those that require no additional training.

5. Many students would like more information about specific jobs than is generally available. What additional information do you feel should be available?

- |                                    |   |
|------------------------------------|---|
| 51% a. What is done on the job.    | 58% e. Training requirements.                 |
| 35% b. Where the job may be found. | 49% f. Where to get the training.             |
| 41% c. Salary.                     | 43% g. What the employment possibilities are. |
| 35% d. Advancement opportunities.  | 03% h. None.                                  |

6. Would you like more help in learning ways of arriving at better decisions concerning your future career?

76% YES    15% NO    \*THESE PERCENTAGES ARE ROUNDED TO THE NEAREST WHOLE NUMBER.



# APPENDIX D

Summary of CISI Product Sales for FY 75

As of June 30, 1975, CISI has 158 subscriber agencies, i.e., institutions that have purchased at least one needle-sort deck and associated materials. This summary reflects sales to these agencies as well as sales of such things as additional Leader's Guides, extra single print sets, etc.

<u>Item</u>	<u>Number</u>	<u>Cost Per Item</u>	<u>Total</u>
Subscription	165	\$60.00	\$ 9,900.00
Extra Needle-Sort Deck	1	30.00	30.00
Print Set (10 copies of each brief)	42	50.00	2,100.00
Single Print Set	1	5.00	5.00
User's Handbooks - Computerized	200	.05	10.00
User's Handbooks - Needle-Sort	14,900	.05	745.00
Leader's Guide	3	5.00	15.00
			<hr/>
		TOTAL	\$12,805.00

# APPENDIX E

Because of reproduction problems,  
the following pages have been removed:

Appendix E